

*This listing of claims will replace all prior versions, and listings, of claims in the application:*

**Listing of Claims:**

**Claim 1 (Currently Amended):** An image processing method, comprising the steps of:

providing image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data; and

when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusting picture quality of the image data using a subject brightness level derived from the subject brightness information,

wherein the picture quality adjustment step includes a step of executing color balance adjustment processing of the image data using the subject brightness level,

wherein the picture quality adjustment step includes a step of adjusting intensity of the color balance adjustment processing to a higher level as the subject brightness level becomes lower, over at least a portion of the subject brightness level range in which the subject brightness level is low,

wherein the picture quality adjustment step includes

(i) a process of analyzing the image data to determine a magnitude of color shift indicating an extent of color skew in the image data,

(ii) a process of selecting a processing level of the color balance adjustment processing, based on the magnitude of the color shift, and

(iii) a process of executing the color balance adjustment processing according to the selected processing level, and

wherein

the intensity of the color balance adjustment processing is adjusted by varying a process parameter that affects a result of at least one of the process (i) and the process (ii),  
and

the picture quality adjustment step includes a step of determining the magnitude of the color shift, using pixel values of a substantially achromatic area of the image data.

**Claims 2-5 (Canceled).**

**Claim 6 (Currently Amended):** An image processing method according to Claim [[5]] 1, wherein

the picture quality adjustment step includes a step of determining the magnitude of the color shift, using pixel values of an area located within a substantially achromatic area of the image data but excluding areas thereof having predetermined hue.

**Claim 7 (Currently Amended):** An image processing method according to Claim [[4]] 1, wherein

the intensity of the color balance adjustment processing is adjusted by varying a process parameter that represents a ratio of the processing level of the color balance adjustment process to the magnitude of the color shift.

**Claim 8 (Currently Amended):** An image processing method according to Claim [[5]] 1, wherein

the intensity of the color balance adjustment processing is adjusted by varying a process parameter that defines a range of the substantially achromatic area.

**Claim 9 (Currently Amended):** An image processing method according to Claim [[2]] 1, wherein

the picture quality adjustment step includes the steps of: when the image generation record information includes supplemental light source firing information at the time of generation of the image data, determining whether the supplemental light source provided illumination at the time of generation of the image data, using the firing information; and executing the color balance adjustment processing using the subject brightness level if it is determined that illumination was not provided.

**Claim 10 (Currently Amended):** An image processing method ~~according to Claim 1,~~  
~~wherein~~ comprising the steps of:

providing image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data; and

when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusting picture quality of the image data using a subject brightness level derived from the subject brightness information,

wherein the image generation record information further includes supplemental light source firing information at the time of generation of the image data, and information relating to a distance between the subject of the image data and the image generating device at the time of generation of the image data,

and wherein the picture quality adjustment step includes a step of performing the picture quality adjustment processing suitable for a portrait image when it is determined that the supplemental light source provided illumination based on the firing information, and that the distance from the subject is shorter than a predetermined distance threshold value, and that the subject brightness level is above a predetermined brightness threshold value.

**Claim 11 (Original):** An image processing method according to Claim 1, wherein

the picture quality adjustment step includes a step of, when the image generation record information includes photometric brightness information regarding a result of measuring subject brightness at the time of generation of the image data, calculating the subject brightness using the photometric brightness information.

**Claim 12 (Original):** An image processing method according to Claim 1, wherein

the picture quality adjustment step includes a step of, when the image generation record information includes information relating to aperture value and information relating to shutter speed of the image generating device at the time of generation of the image data, calculating the subject brightness level using the aperture value and the shutter speed.

**Claim 13 (Original):** An image processing method according to Claim 1, wherein the picture quality adjustment step includes a step of, when the image generation record information includes information relating to aperture value, information relating to shutter speed of the image generating device at the time of generation of the image data, and information relating to optical circuit sensitivity, calculating the subject brightness level is using the aperture value, the shutter speed, and the sensitivity.

**Claim 14 (Currently Amended):** An image processing device for performing image processing using image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data, the image processing device comprising:

a picture quality adjuster that, when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusts picture quality of the image data using a subject brightness level derived from the subject brightness information,

wherein the picture quality adjuster executes color balance adjustment processing of the image data using the subject brightness level,

wherein the picture quality adjuster adjusts intensity of the color balance adjustment processing to a higher level as the subject brightness level becomes lower, over at least a portion of the subject brightness level range in which the subject brightness level is low,

wherein the picture quality adjuster performs

(i) a process of analyzing the image data to determine a magnitude of color shift indicating an extent of color skew in the image data,

(ii) a process of selecting a processing level of the color balance adjustment processing, based on the magnitude of the color shift, and

(iii) a process of executing the color balance adjustment processing according to the selected processing level, and

wherein the picture quality adjuster

adjusts the intensity of the color balance adjustment processing by varying a process parameter that affects result of at least one of the process (i) and the process (ii), and

determines the magnitude of the color shift, using pixel values of a substantially achromatic area of the image data.

**Claim 15 (Currently Amended):** An output device for outputting an image using image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data, the output device comprising:

a picture quality adjuster that, when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusts picture quality of the image data using a subject brightness level derived from the subject brightness information, and

an image output unit for outputting an image according to the image data after the picture quality adjustment,

wherein the picture quality adjuster executes color balance adjustment processing of the image data using the subject brightness level,

wherein the picture quality adjuster adjusts intensity of the color balance adjustment processing to a higher level as the subject brightness level becomes lower, over at least a portion of the subject brightness level range in which the subject brightness level is low,

wherein the picture quality adjuster performs

(i) a process of analyzing the image data to determine a magnitude of color shift indicating an extent of color skew in the image data,

(ii) a process of selecting a processing level of the color balance adjustment processing, based on the magnitude of the color shift, and

(iii) a process of executing the color balance adjustment processing according to the selected processing level, and

wherein the picture quality adjuster

adjusts the intensity of the color balance adjustment processing by varying a process parameter that affects result of at least one of the process (i) and the process (ii), and

determines the magnitude of the color shift, using pixel values of a substantially achromatic area of the image data.

**Claim 16 (Currently Amended):** A computer program product for causing a computer to execute image processing using image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data, the computer program product comprising:

a computer-readable medium; and

a computer program stored on the computer-readable medium, the computer program includes a program for causing a computer to execute a function of, when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusting picture quality of the image data using a subject brightness level derived from the subject brightness information,

wherein the function of adjusting the picture quality includes executing color balance adjustment processing of the image data using the subject brightness level,

wherein the function of adjusting the picture quality includes adjusting intensity of the color balance adjustment processing to a higher level as the subject brightness level becomes lower, over at least a portion of the subject brightness level range in which the subject brightness level is low,

wherein the function of adjusting picture quality includes

(i) a process of analyzing the image data to determine a magnitude of color shift indicating an extent of color skew in the image data,

(ii) a process of selecting a processing level of the color balance adjustment processing, based on the magnitude of the color shift, and

(iii) a process of executing the color balance adjustment processing according to the selected processing level, and

wherein

the intensity of the color balance adjustment processing is adjusted by varying a process parameter that affects result of at least one of the process (i) and the process (ii), and

the function of adjusting picture quality includes determining the magnitude of the color shift, using pixel values of a substantially achromatic area of the image data.

**Claim 17 (New):** An image processing device for performing image processing using image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data, the image processing device comprising:

a picture quality adjuster that, when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusts picture quality of the image data using a subject brightness level derived from the subject brightness information,

wherein the image generation record information further includes supplemental light source firing information at the time of generation of the image data, and information relating to a distance between the subject of the image data and the image generating device at the time of generation of the image data, and

wherein the picture quality adjuster performs picture quality adjustment processing suitable for a portrait image when it is determined that the supplemental light source provided illumination based on the firing information, and that the distance from the subject is shorter than a predetermined distance threshold value, and that the subject brightness level is above a predetermined brightness threshold value.

**Claim 18 (New):** An output device for outputting an image using image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data, the output device comprising:

a picture quality adjuster that, when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusts picture quality of the image data using a subject brightness level derived from the subject brightness information, and

an image output unit for outputting an image according to the image data after the picture quality adjustment,

wherein the image generation record information further includes supplemental light source firing information at the time of generation of the image data, and information relating

to a distance between the subject of the image data and the image generating device at the time of generation of the image data,

and wherein the picture quality adjuster performs picture quality adjustment processing suitable for a portrait image when it is determined that the supplemental light source provided illumination based on the firing information, and that the distance from the subject is shorter than a predetermined distance threshold value, and that the subject brightness level is above a predetermined brightness threshold value.

**Claim 19 (New):** A computer program product for causing a computer to execute image processing using image data generated by an image generating device, and image generation record information associated with the image data, the image generation record information including at least operating information about the image generating device at the time of generation of the image data, the computer program product comprising:

a computer-readable medium; and

a computer program stored on the computer-readable medium, the computer program includes a program for causing a computer to execute a function of, when the image generation record information includes subject brightness information relating to brightness of a subject at the time of generation of the image data, adjusting picture quality of the image data using a subject brightness level derived from the subject brightness information,

wherein the image generation record information further includes supplemental light source firing information at the time of generation of the image data, and information relating to a distance between the subject of the image data and the image generating device at the time of generation of the image data,

and wherein the function of adjusting picture quality includes performing picture quality adjustment processing suitable for a portrait image when it is determined that the supplemental light source provided illumination based on the firing information, and that the distance from the subject is shorter than a predetermined distance threshold value, and that the subject brightness level is above a predetermined brightness threshold value.